## AMONTANA'S AND AND SPECTACLE

DUCKS, HERONS, SHOREBIRDS, SWANS,

AND COUNTLESS SNOW GEESE

CONGREGATE AT FREEZOUT LAKE

EACH SPRING, CREATING ONE OF THE

NATION'S MOST SPECTACULAR

BIRD-WATCHING OPPORTUNITIES





BERT
GILDART

SNOWING GEESE IN RECENT YEARS, UP TO 500,000 SNOW GEESE HAVE STOPPED AT FREEZOUT LAKE, WHICH LIES WEST OF GREAT FALLS ALONG THE ROCKY MOUNTAIN FRONT.

N A LARGE PRAIRIE lake roughly 15 miles southeast of Choteau, thousands of snow geese create a clamor that sounds like a distant crowd cheering for a star performer. When the noise reaches the peak of its crescendo, the birds rise from the lake as if endowed with a single mind. It looks like a white mountain separating itself from the earth. Even more absorbing than the birds' deafening noise and astounding numbers is the way each individual goose fits into something much larger than itself. In unison, the flock swells then swirls like a white

tornado, swooping and rising before settling back to the water, always together, as though tightly choreographed. Amazingly, despite the close formation, individual birds rarely collide, or even touch.

Sometimes, a flock completely settles, though it takes little to stir the nervous birds again. And sometimes a flock will rise up and strike out to the north, moving as unstoppably as retreating glaciers from the last great ice age.

The snow goose spectacular is just one of many bird-watching wonders to be found at Freezout Lake Wildlife Management Area in early spring. Owned and managed by Montana Fish, Wildlife &

Parks, the 11,350-acre WMA attracts more than a million birds each year, from stately tundra swans to tiny Tennessee warblers.

"We've documented more than 200 different species using the area," says Mark Schlepp, WMA manager.

Though snow geese are the most abundant species—and get the most attention from birders—Freezout also is renowned for concentrations of American avocets, black-necked stilts, and various herons, gulls, terns, sparrows, and phalaropes. The birds are attracted to the area's abundant water and diverse mix of water levels and plant communities. The site is vital to so many migrating species that the

National Audubon Society considers Freezout one of the most important bird areas in the entire United States.

hough Freezout existed long before European settlers arrived in the area, the lake was much smaller than the current one and often dried up. The lake began to expand during the early 1900s, when the federal Bureau of Reclamation began drawing water from the nearby Sun River into a network of canals from which farmers could irrigate their fields. Because Freezout was a low spot on the landscape, excess water from the fields drained into the lake, which, over the decades, continued to grow. By the 1940s, says Schlepp, it was about twice the size it is today and covered what is now U.S. Highway 89.

In the 1950s, to lower water levels and increase wildlife habitat, FWP began managing the lake. The department and the Bureau of Land Management jointly built an outlet that flows to the Teton River to the north, as well as a half-dozen dikes that separated the eastern part of Freezout Lake into six interconnecting ponds. By adjusting water levels in the ponds throughout the year, wildlife managers can create a variety of different habitat conditions. Periodic mowing and prescribed burns help reinvigorate grasses, forbs, and other plants that provide abundant nesting cover around the

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lake and ponds. Planted alfalfa provides cover and food, and shelterbelts give wintering birds refuge from winds blowing down from the Rocky Mountain Front.

"By managing the water and cover we've been able to provide habitat for the broad array of bird species using this area," Schlepp says.

No species has benefited more from changes to the Freezout landscape than the snow goose. The abundant waterfowl flock to the lake in spring and fall, leaving twice each day to feed on spent grain on surrounding farm fields. Nearby Fairfield bills itself as the "Malting Barley Capital of the World," but it could also boast of being the "World Champion



THERE'S NO GEESE LIKE SNOW GEESE
BETWEEN TRIPS TO NEARBY BARLEY FIELDS TO
FEED, SNOW GEESE REST AT FREEZOUT (BELOW
LEFT) AND ADJACENT PONDS. BANDED BIRDS
(ABOVE) AND BLUE PHASE SNOWS (RIGHT)
STAND OUT FROM THE CROWD. IN FLIGHT,
BLACK WING TIPS ARE EASILY VISIBLE TO THE
HUNDREDS OF BIRD WATCHERS WHO FOCUS
THEIR ATTENTION ON FREEZOUT EACH SPRING.





Snow Goose Food Producer."

During early April, at the height of the snow goose staging at Freezout, I accompany Dan Casey, who is leading a weekend tour here for the Flathead Chapter of the Audubon Society. Casey, previously an FWP biologist and now a representative of the American Bird Conservancy in Kalispell, maintains that the spring snow goose concentration at Freezout is one of North America's greatest wildlife spectacles, on par with the famous sandhill crane concentration in central Nebraska.

During the Freezout tour, I meet Michael Schwitters of Choteau, a retired Air Force colonel who now works as a freelance bird bander and monitorer. Schwitters says snow geese using the Freezout complex are from three populations—the Wrangel Island (off Russia's northeastern coast), the Prudhoe Bay (Alaska), and the Western Canadian Arctic—identified for where they nest. For the past 14 years, the ardent goose fan has been following snows between their wintering grounds on Tule Lake, in California's Sacramento Valley, and their Arctic breeding grounds. He has recorded nearly 40,000 collar numbers that he reports back to the state, provincial, and federal biologists who banded the birds so they can better understand snow goose movements and migration patterns.

Peering through his spotting scope at a goose-covered stubble field, Schwitters

smiles and says, "There's Tutu," a bird so named for its neck band adorned with the code 2TO. "That's a goose from Russia," he adds, indicating another bird. "I know by the color of the band."

Amid the sea of white we see many blue geese, a darker phase that make up roughly 20 percent of the snow geese at Freezout. Both blues and the regular snow goose varieties have dark wing tips.

hen a flock of snow geese arrives at Freezout, the birds settle onto the lake and ponds to rest. The next morning, just after sunrise, they rise and head for the nearby grain fields to feed. A few hours later, at around 10 a.m., the birds return from the fields to the water, where they drink and rest before returning to feed in mid-afternoon. At dusk, they again return to Freezout to spend the night.

In spring, an incoming flock of snow geese remains at Freezout Lake for an average of about four days before heading to the Arctic. One question puzzling biologists and birders is why snow geese travel up to 2,000 miles to nest, when their close cousins, Canada geese, are content to remain within just a few hundred miles of where they hatch. One theory holds that snow geese grew dependent on a specific cold-climate food base during the most recent ice age and then were forced to move steadily northward as the glaciers began to recede.



On this brisk spring day, a segment of one flock lifts from the lake into the air with apparent resolve. Strong winds have been forecast, and perhaps the geese sense an impending tailwind. Higher they fly, spreading out into a number of loose but discernible V-like formations as they strike out for the Arctic.

Six months from now, in early November, these flocks will return to Freezout before heading south to California. Accompanying the paired adults will be young geese that hatched in the Arctic. And six months after that, the family groups will fly north once again, stopping at Freezout to rest and build fat reserves.

The predictable return of snow geese to Freezout can be as reassuring as a muchanticipated family reunion. In a world that seems in constant flux, the biennial reappearance of snow geese and other water birds to this great prairie wildlife area says that many of the world's ancient and most complex natural processes are still very much in order.

Editor's Note: Freezout WMA is 40 miles northwest of Great Falls, just off U.S. Highway 89. Interior roads are open to vehicles from March 15 until late September.





## Controlling freezout's weird water

"This is an extremely difficult system to manage," says Freezout WMA manager Mark Schlepp. "For us to maintain a successful wetlands complex, we need to constantly monitor water quality and quantity."

Because the lake eventually drains north into the Teton River, Schlepp and his staff must check salinity and water levels three times each week.

"We have to be sure we don't send too much water into the Teton," he says. "The high salinity from Freezout could really harm the river system."

That hasn't been a concern recently. For the past several years, a prolonged drought has meant that not enough water is reaching Freezout.

"We've got one pond completely dry, others are way down, and the lake itself is only about half what it is in an average year," Schlepp says.

Low water means more than just less habitat for wildlife. For decades, salt and selenium in surrounding soils have been washing down into Freezout. When the lake is low, evaporation is rapid, further concentrating the minerals. High levels of selenium have been shown to deform or even kill birds. "That's the worst-case scenario if this drought continues," Schlepp says.





Salt and selenium from irrigated barley fields drain into —*Tom Dickson* Freezout Lake, requiring constant monitoring.